Original MLULSP instance
(centralized planning)
(*N* = 5 items; *T* = 12 periods)

```
5       12      1

1       0.073205
2       0.06655
3       0.0605
4       0.055
5       0.05

1       1.28
2       3.2
3       8.0
4       20.0
5       50.0

1       80
2       100
3       125
4       100
5       50
6       50
7       100
8       125
9       125
10      100
11      50
12      100

1       2
2       3
3       4
4       5
5
```

N = 5 items; *T* = 12 periods; *R* = 1 end-product

inventory-holding costs for 5 items

setup costs for 5 items

independent demand for 12 periods

product structure

Extension
(decentralized planning)
(*n* = 2, 5 agents or facilities)

```
1       2
3       4       5

uniform distribution
```

case *n* = 2 (random distribution):
agent 1 : items 1, 2
agent 2: items 3, 4, 5

case *n* = 5 (uniform distribution):
agent 1 : item 1
agent 2: item 2
agent 3: item 3
agent 4: item 4
agent 5: item 5